

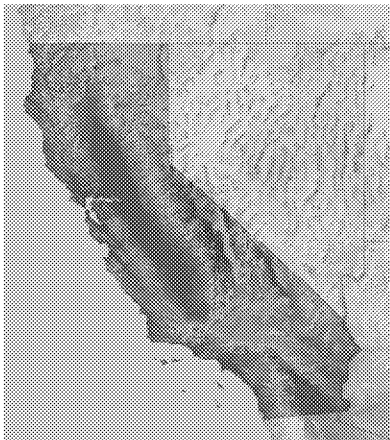
Schlumberger, Chevron, Microsoft plan BECCS project in California

By Schlumberger New Energy | March 04, 2021

Schlumberger New Energy, Chevron Corp., Microsoft and Clean Energy Systems today announced plans to develop a groundbreaking bioenergy with carbon capture and sequestration (BECCS) project designed to produce carbon negative power in Mendota, California.

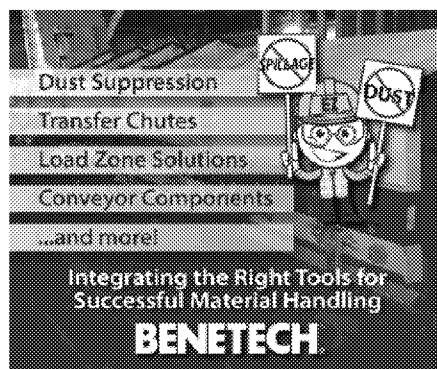
The BECCS plant will convert agricultural waste biomass, such as almond trees, into a renewable synthesis gas that will be mixed with oxygen in a combustor to generate electricity. More than 99 percent of the carbon from the BECCS process is expected to be captured for permanent storage by injecting carbon dioxide (CO₂) underground into nearby deep geologic formations.

By using biomass fuel that consumes CO₂ over its lifetime to produce power and then safely and permanently storing the produced CO₂, the process is designed to result in net-negative carbon emissions, effectively removing greenhouse gas from the atmosphere. The plant, when completed, is expected to remove about 300,000 tons of CO₂ annually, which is equivalent to the emissions from electricity use of more than 65,000 U.S. homes.



"We are excited to welcome Chevron and Microsoft on this

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exciting opportunity, as it further demonstrates how we play an enabling role to deploy carbon capture and sequestration solutions at scale," said Ashok Belani, Schlumberger New Energy executive vice president. "We are diversifying our portfolio of projects with partnerships in selected markets and geographies where existing policies and regulations can make projects attractive today. This unique BECCS project in California is a game-changing example of this."

"There's tremendous opportunity to use cloud technologies in the energy sector to help accelerate the industry's digital transformation," said Scott Guthrie, executive vice president, Cloud + AI, Microsoft. "Innovation at this scale is accelerated by our strong relationship, as we work together to help provide a sustainable and clean environment for local communities."

"We're pleased to have strong partners join our efforts to address the challenges of climate change, improve air quality in the Central Valley and make a vital contribution to the local economy by restarting an idled biomass plant," said Keith Pronske, Clean Energy Systems president and CEO.

"Chevron is helping to advance a lower-carbon future," said Bruce Niemeyer, Chevron's vice president of strategy and sustainability. "We look forward to leveraging our experience working in California, building projects which can be repeated, and operating large-scale carbon capture and storage operations. The project is aligned with our focus on investments in low-carbon technology to enable commercial solutions."

The completed facility will help improve air quality in the Central Valley by using approximately 200,000 tons of agricultural waste annually, in line with the recent California Air Resources Control Board plan to begin phasing out almost all agricultural burning in the Valley by 2025. The bioenergy technology is designed to operate without routine emissions of nitrous oxide, carbon monoxide and particulates from combustion produced by conventional biomass plants.

The project is expected to create up to 300 construction jobs and about 30 permanent jobs once the facility is operating. The companies involved expect to begin front end engineering and design immediately, leading to a final investment decision in 2022, and will then evaluate other opportunities to scale this carbon capture and sequestration solution.